TITLE: COMPOSITIONS AND METHODS TO QUENCH LIGHT FROM OPTICAL REACTIONS INVENTOR'S NAME: ERIKA HAWKINS, ET AL. SERIAL NO.: 10/777,461 DOCKET NO.: 341.022US1

REPLACEMENT SHEET

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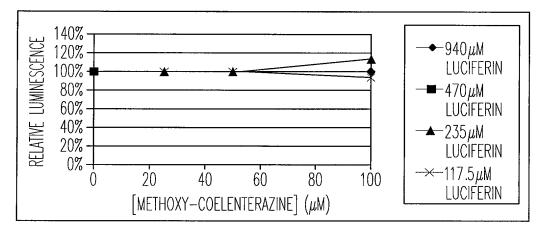


Fig.1

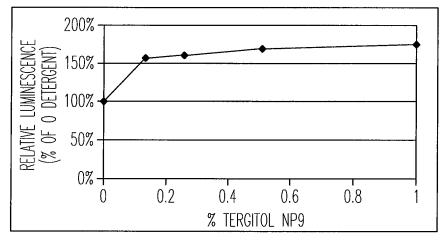


Fig.2

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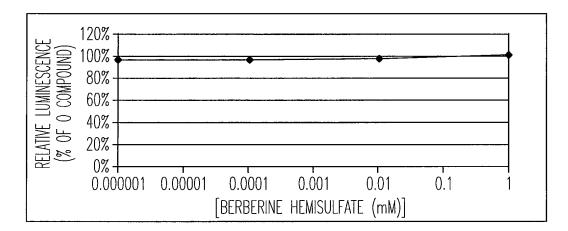


Fig.3

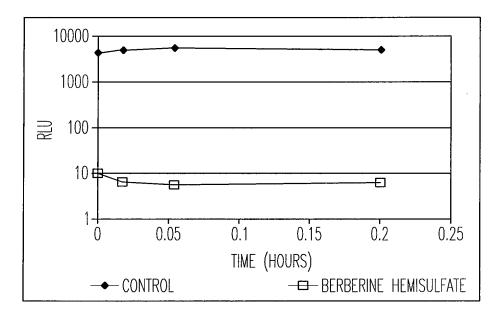


Fig.4

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NON-IONIC DETERGENTS							
DETERGENT NAME	PURITY	MW (MONOMER)	CMC (mM)	CMC CONDITIONS	AGGREG- ATION #	MW (MICELLE)	
AP0-10	М	218.3	4.6	50 mM Na ⁺	131	28,597	
AP0-12	М	246.4	0.568	50 mM Na ⁺	2232	549,965	
BRIJ-35 (C ₁₂ E ₂₃)	М	1200 (AVG)	0.09	50 mM Na ⁺	40		
C ₈ E ₆	М		9.9	25°C	32	13,000	
C ₁₀ E ₆	М	427.1	0.9	50 mM Na ⁺	40	17,084	
C ₁₀ E ₈	М	515.1					
C ₁₂ E ₆	М	451.1	0.087	50 mM Na ⁺			
C ₁₂ E ₈ (ATLAS G2127)	М	539.1	0.11	50 mM Na ⁺	123	66,309	
C ₁₂ E ₉	М	583.1	0.08	50 mM Na ⁺			
C ₁₂ E ₁₀ (BRIJ 36T)	М		0.2				
C ₁₆ E ₁₂	М		0.0023	25°C	152	117,000	
C ₁₆ E ₂₁	М		0.0039	25°C	70	82,000	
CYCLOHEXYL-n- Ethyl- β-d-maltoside	М	452.5	120	50 mM Na ⁺			
CYCLOHEXYL-n- HEXYL- β-D-MALTOSIDE	М	508.6	0.56	50 mM Na ⁺			
CYCLOHEXYL-N- METHYL- β-D-MALTOSIDE	М	438.5	340	50 mM Na ⁺			
n – DECANOYLSUCROSE	М	496.6	2.5	50 mM Na ⁺			
n-decyl-β- D-glucopyranoside	М	320.4	2.2	50 mM Na ⁺			
n-decyl-β- D-maltopyranoside	М	482.6	1.6	50 mM Na ⁺			

Fig.5A (PRIOR ART)

Fig.5B (PRIOR ART)

n-decyl-β-						
D-THIOMALTOSIDE	M	498.6	0.9	50 mM Na ⁺		
DIGITONIN	М	1229.3			60	70,000
n-dodecanoyl Sucrose	М	524.6	0.3	50 mM Na ⁺		
n-dodecyl-β- D-glucopyranoside	М	348.5	0.13	50 mM Na ⁺		70,000
N-DODECYL-β- D-MALTOSIDE	М	348.5	0.15	50 mM Na ⁺	98	70,000
GENAPOL C-100	Р	627 (AVG)				50,000
GENAPOL X-80	Р	553 (AVG)	0.06- 0.15	50 mM Na ⁺		
GENAPOL X-100	Р	641 (AVG)	0.15	50 mM Na ⁺	88	56,000
HECAMEG	М	335.4	19.5	50 mM Na ⁺		
HEPTANE-1,2,3-TRIOL	М	148.2				
n-HEPTYL-β- D-glucopyranoside	М	278.3	79	50 mM Na ⁺		
$n-HEPTYL-\beta-D-$ THIOGLUCOPYRANOSIDE	М	294.3	30	50 mM Na ⁺		
LUBROL PX	Р	582	0.006	50 mM Na ⁺	110	64,000
MEGA-8 (OCATANOYL- N-METHYLGLUCAMIDE)	М	321.5	58	50 mM Na ⁺		
MEGA—9 (NONANOYL— N—METHYLGLUCAMIDE)	М	335.5	19–25	50 mM Na ⁺		
MEGA-10 (DECANOYL- N-METHYLGLUCAMIDE)	М	349.5	6-7	50 mM Na ⁺		
$\begin{array}{c} N-NONYL-\beta-D-\\ GLUCOPYRANOSIDE \end{array}$	М	306.4	6.5	50 mM Na ⁺		
NONIDET P-10 (NP-10)	Р					

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Fig.5C (PRIOR ART)

NONIDET P-40 (NP-40)	М	603.0	0.05-0.3	50 mM Na ⁺	100-155	
N-OCTANOYL-β-D- GLUCOSLYAMINE (NOGA)	М	305.4	80	50 mM Na ⁺		
n-octanoyl Sucrose	М	468.5	24.4	50 mM Na ⁺		
N-OCTYL-alpha- D-GLUCOPYRANOSIDE	М	292.4	20			
N-OCTYL-β-D- GLUCOPYRANOSIDE	М	292.4	25	50 mM Na ⁺	27	7,895
N-OCTYL-β-D- MALTOPYRANOSIDE	М	454.5	23.4	50 mM Na ⁺		
PLURONIC F-68	Р	8400 (AVG)				
PLURONIC F-127	Р	12,600 (AVG)				
THESIT		583	0.1	50 mM Na ⁺		
TRITON X-100 (TERT-C ₈ -Ø-E _{9.6; LIKE NP-40)}	Р	650 (AVG)	0.3	50 mM Na ⁺	140	90,000
TRITON X-100 HYDROGENATED	Р	631 (AVG)	0.25	50 mM Na ⁺		
TRITON X-114 (TERT-C ₈ -Ø-E ₇₋₈)	Р	537 (AVG)	0.35	50 mM Na ⁺		
TWEEN 20 (C ₁₂ – SORBITAN–E ₂₀ ; POLYSORBATE 20)	Р	1228 (AVG)	0.059	50 mM Na ⁺		
Tween 40 (C ₁₆ - Sorbitan-e ₂₀)	Р		0.027			
tween 60 (C ₁₈ – Sorbitan–e ₂₀)	Р		0.025			
TWEEN 80 (C _{18:1} - SORBITAN-E ₂₀)	Р	1310 (AVG)	0.012	50 mM Na ⁺	58	75,980
N-UNDECYL-β-D- MALTOSIDE	М	496.6	0.59	50 mM Na ⁺		

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IONIC DETERGENTS							
DETERGENT NAME	PURITY ‡	MW (MONOMER)	CMC (mM)§	CMC CONDITIONS	AGGREG- ATION #	MW (MICELLE)	
Caprylic acid, Na ⁺ Salt (n-octanoate)	М	166.2	351				
CETYLPYRIDINIUM CHLORIDE	М	274.0	0.90				
CTAB (CETYLTRIMETHYL- AMMONIUM BROMIDE)	М	364.5	1.0	50 mM Na ⁺	170	62,000	
CHOLIC ACID, Na ⁺ SALT	М	430.6	4	50 mM Na ⁺	3	1200	
DECANESULFONIC ACID, Na ⁺ salt	М	244.3	32.6				
DEOXYCHOLIC ACID, Na ⁺ SALT (DOC)	М	414.6	1.5	50 mM Na ⁺	5	2000	
DIGITONIN	Р	1229	0.087		60	70,000	
DODECYLTRIMETHYL- AMMONIUM BROMIDE	М	308.4	14				
GLYCOCHOLIC ACID, Na ⁺ salt	М	487.6	7.1	50 mM Na ⁺	2.1	1000	
GLYCODEOXYCHOLIC- ACID, NO ⁺ SALT	М	471.6	2.1	50 mM Na ⁺	2.1	1000	
LAUROYLSARCOSINE, Na ⁺ SALT (SARKOSYL)	М	293.4			2	900	
LITHIUM-N-DODECYL SULFATE	М	272.3	6-8	50 mM Na ⁺			
LYSOPHOSPHATIDYL- CHOLINE (16:0)	М	495.7	0.007		186	92,000	
SODIUM N-DODECYL SULFATE (SDS, LAURYL SULFATE, NO ⁺ SALT)	М	288.5	2.30	50 mM Na ⁺	84	24,200	

Fig.5D (PRIOR ART)

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TAUROCHENODEOXY- CHOLIC ACID, Na ⁺ SALT	М	521.7				
taurocholic acid, Na ⁺ salt	М	537.7	3.3	20 mM Na ⁺	4	2150
TAURODEHYDROCHOLIC ACID, NO ⁺ SALT	М	531.6				
TAURODEOXYCHOLIC ACID, Na ⁺ salt	М	521.7	2.7	50 mM Na ⁺	8	4200
TAUROLITHOCHOLIC ACID, Na ⁺ salt	М	505.7				
TAUROURSODEOXY- CHOLIC ACID	М	521.7				
TETRADECYLTRIMETHYL AMMONIUM BROMIDE (TDTAB)	М	336.4	3.5	30°C	81	27,000
TOPPS	М	350.5	4.5	50 mM Na ⁺		

Fig.5E (PRIOR ART)

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ZWITTERIONIC DETERGENTS							
DETERGENT NAME	PURITY	MW (MONOMER)	CMC (MM)	CMC CONDITIONS	AGGREG- ATION #	MW (MICELLE)	
BIGCHAP	M	878.1	3.4	50 mM Na ⁺	10	8800	
CHAPS	М	614.9	6-10	50 mM Na ⁺	10	6150	
CHAPSO	М	630.9	8	50 mM Na ⁺	11	9960	
DDMAU	M	397.7	0.13	50 mM Na ⁺			
EMPIGEN BB (N- DODECYL- N,N-DIMETHYLGLYCINE)	М	272.0	1.6-2.1	50 mM Na ⁺			
LAURYLDIMETHYLAMINE OXIDE (LADAO, LDAO, EMPIGEN OB)	М	229.4	1–3	50 mM Na ⁺	76	17,000	
ZWITTERGENT 3-08	М	279.6	330	50 mM Na ⁺			
ZWITTERGENT 3-10	М	307.6	25-40	50 mM Na ⁺	41	12,600	
ZWITTERGENT 3-12 (3-DODECYL- DIMETHYLAMMONIO- PROPANE-1- SULFONATE)	М	335.6	2-4	50 mM Na ⁺	55	18,500	
ZWITTERGENT 3-14	М	363.6	0.1-0.4	50 mM Na ⁺	83	30,200	
ZWITTERGENT 3-16	М	391.6	0.01- 0.06	50 mM Na ⁺	155	60,700	

Fig.5F (PRIOR ART)